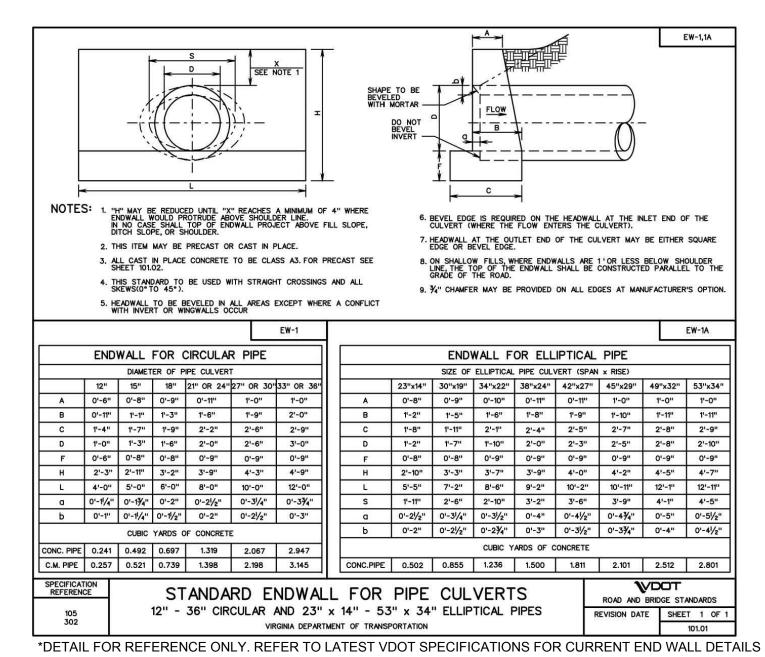


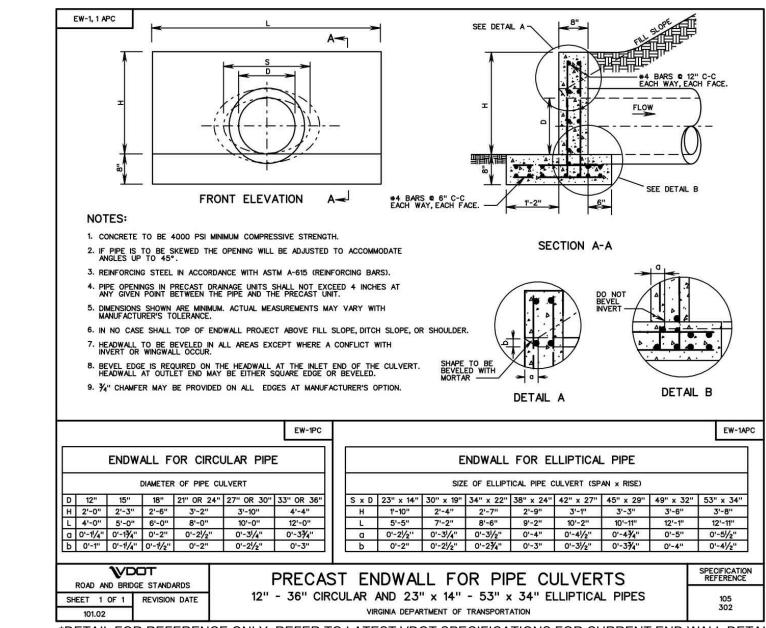
VDOT ES-1 FLARED END SECTION
SCALE: NTS



AND STANDARDS.

VDOT EW-1 END WALL (CAST IN PLACE OPTION)

SCALE: NTS



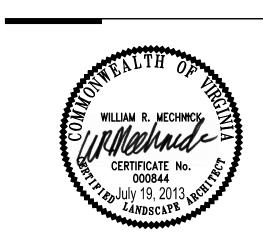
*DETAIL FOR REFERENCE ONLY. REFER TO LATEST VDOT SPECIFICATIONS FOR CURRENT END WALL DETAILS AND STANDARDS.





Appomattox River
Greenway Trail Phase III

Colonial Heights, Virginia



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Scale	see sheet	Date July 19, 2013

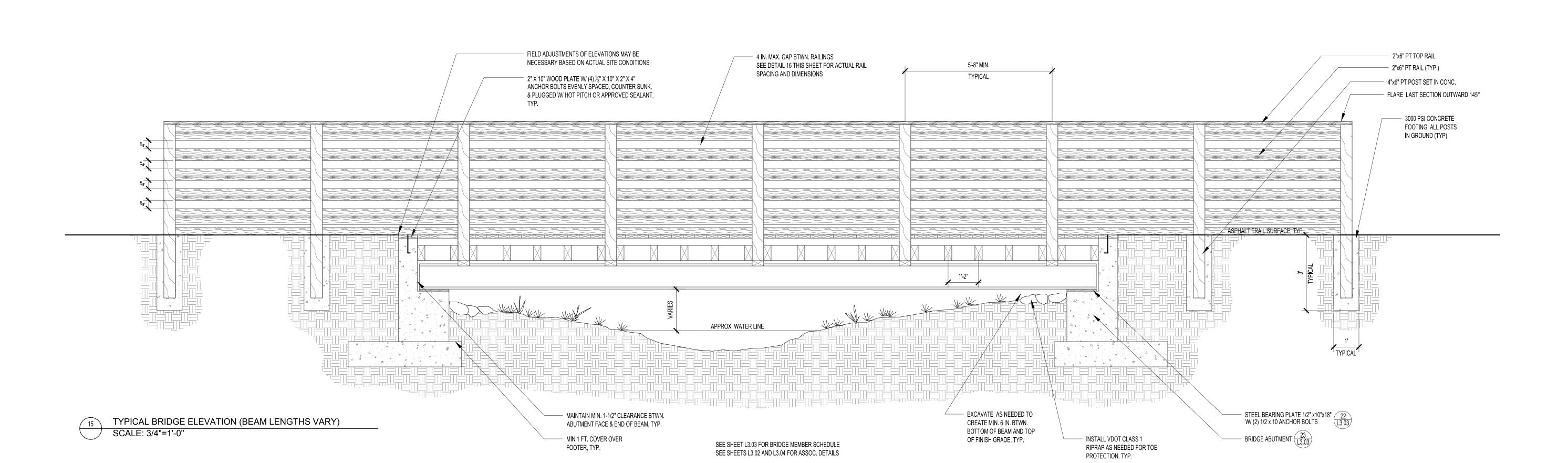
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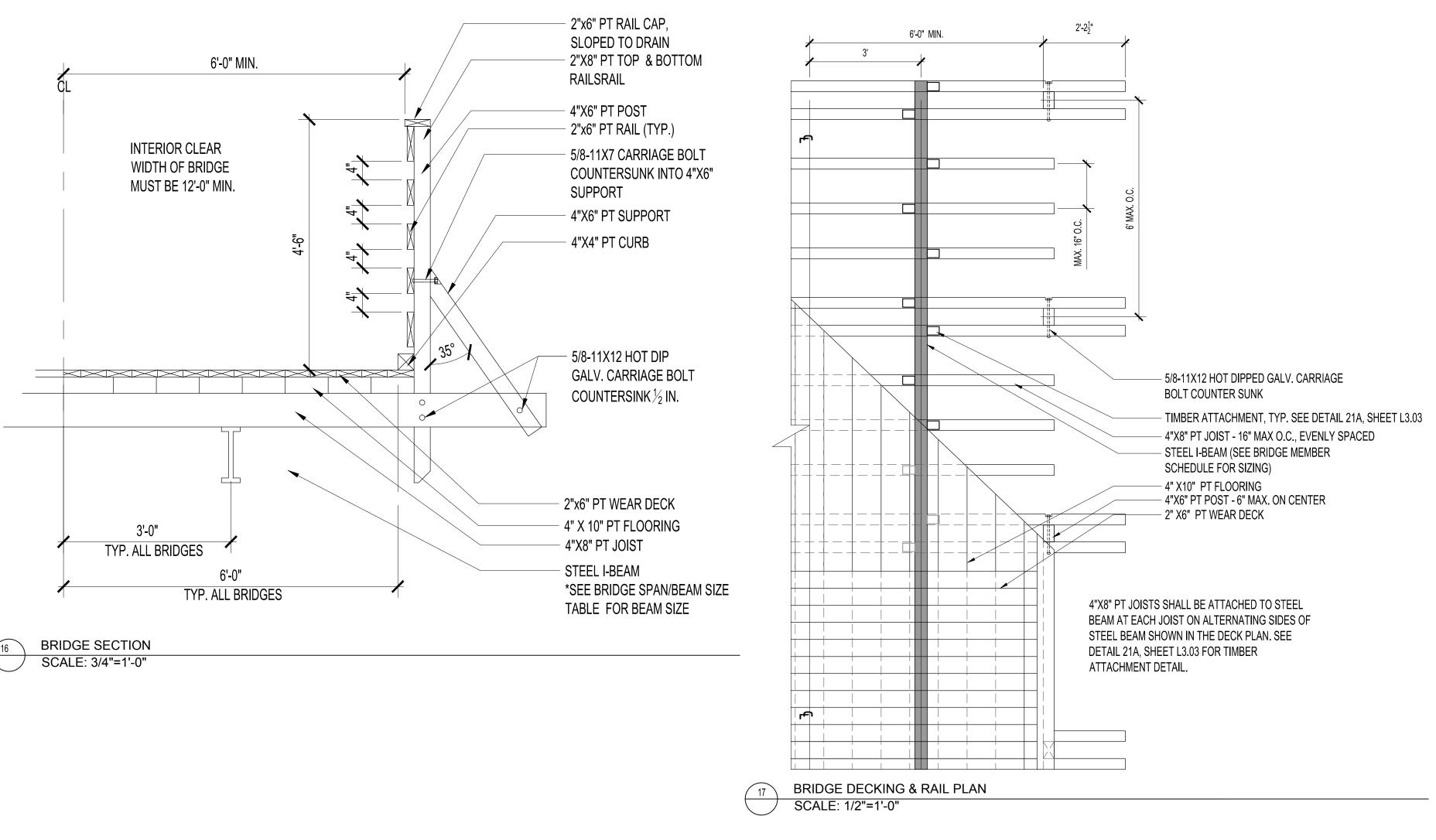
Drawing Title

Site Details

Drawing Numbe

Project Number





GENERAL NOTES:

1) INTERIOR WIDTH: 12'-0" FACE OF CURB TO FACE OF CURB.

2) SPAN LAYOUT: ROLLED STEEL BEAM. SEE BRIDGE MEMBER SCHEDULE SHEET L3.03 FOR BRIDGE SPAN LENGTHS.

CAPACITY: H-10 TRUCK LOADING.

4) DESIGN SPECIFICATIONS:

CONSTRUCTION: VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGES SPECIFICATIONS, 2007.

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION, 2007; 2008 AND 2009 INTERIM SPECIFICATIONS; AND VDOT MODIFICATION.

5) THESE PLANS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE SUPPLEMENTAL SPECIFICATION AND SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. 6) THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA DEPT. OF TRANSPORTATION WORK AREA PROTECTION MANUAL, MAY 2005 OR LATEST EDITION WITH LATEST REVISIONS.

7) REINFORCING STEEL SHALL BE SPACED 12" CENTER TO CENTER UNLESS NOTED OTHERWISE ON PLANS. CONTRACTOR TO PROVIDE REINFORCING STEEL SCHEDULE WHICH SHALL INCLUDE SIZE, LENGTH, AND PIN DIAMETER OF REINFORCING BARS PRIOR TO BRIDGE CONSTRUCTION.

8) ALL WOOD SHALL BE PRESSURE-TREATED SOUTHERN PINE #2, WITH TREAMENT TYPE APPROPRIATE FOR EACH APPLICATION.

9) ALL DECKING SHALL BE SCREWED IN PLACE. ALL DECKING SCREWS SHALL BE FLAT HEAD AND LONG ENOUGH TO EMBED MORE THAN 1-1/2" INTO WOOD SUBSTRATE.

10) ALL STEEL SHALL BE ASTM A709 GRADE 50 AND SHALL BE GALVANIZED. 11) ALL FASTENERS AND CONNECTORS SHALL BE HOT-DIPPED GALVANIZED. HOT-DIP GALVANIZED REQUIREMENTS FOR USE WITH TREATED WOOD SHOULD CONFORM TO

THE FOLLOWING ASTM STANDARDS: ASTM-A153 (FOR HOT-DIP FASTENER PRODUCTS) AND ASTM-A653 (COATING DESIGNATION G-185 FOR HOT-DIP CONNECTOR AND SHEET PRODUCTS).

12) CONTRACTOR SHALL PROVIDE INSPECTION AND TESTING CONDUCTED BY A GEOTECHNICAL ENGINEER DURING EXCAVATION FOR BRIDGE ABUTMENT AND WINGWALL FOOTERS.

13) UPON DISCOVERY OF UNSUITABLE SOILS FOR THE ABUTMENT OR WINGWALL FOUNDATIONS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE PLANNING DIRECTOR, LANDSCAPE ARCHITECT, AND GEOTECHNICAL ENGINEER. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AND ANY ADDITIONAL STONE OR OTHER SUITABLE MATERIAL SHALL BE PLACED, AS DIRECTED BY GEOTECHNICAL ENGINEER, PRIOR TO POURING THE CONCRETE FOOTINGS FOR WINGWALLS OR ABUTMENTS.

14) STRENGTH OF CONCRETE SHALL BE CLASS A3.

15) THE FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2000 PSF.

16) BRIDGE BEGINNING AND ENDING STATIONS AND ELEVATIONS OF BRIDGES ARE SHOWN ON LAYOUT SHEETS. SKEW ANGLE OF BRIDGES SHALL BE 90° (TYP.). ABUTMENT FOOTPRINT SHOWN ON LAYOUT SHEETS AND SHEET L3.04.

ELPDA LAND PLANNING & DESIGN
A S S O C I A T E S

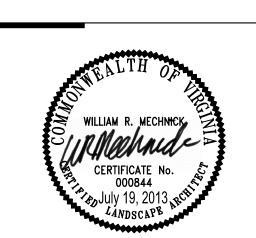
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Appomattox River Greenway Trail Phase III

Colonial Heights, Virginia



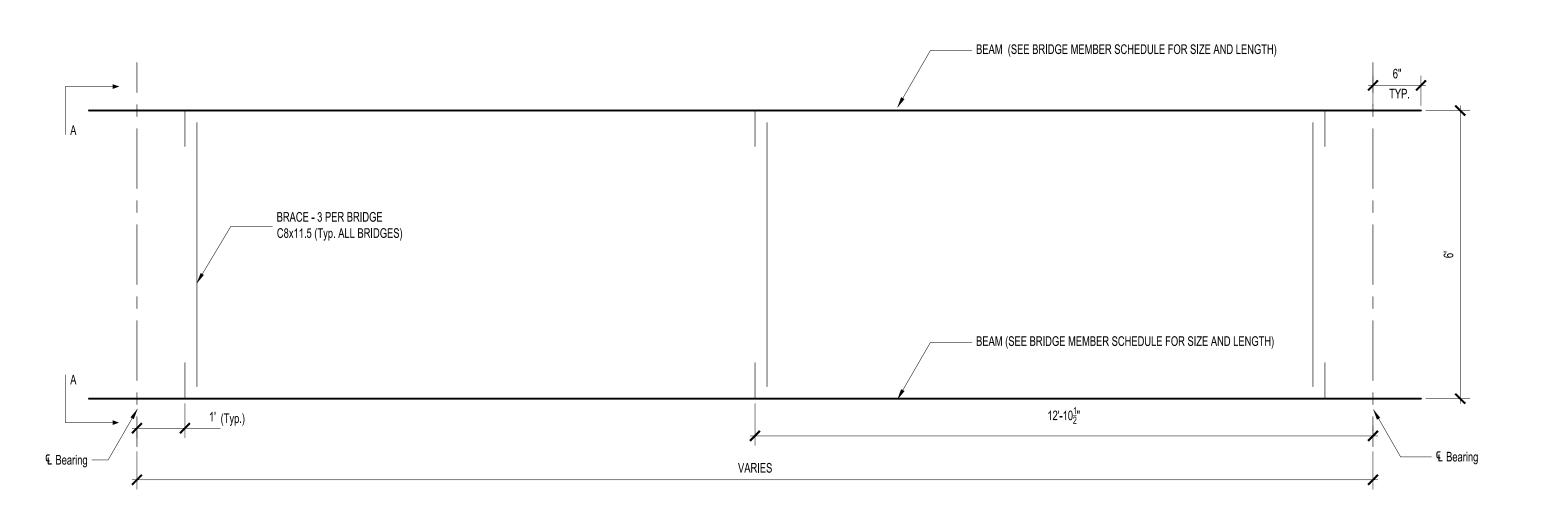
Revision

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scale see sheet	Date July 19, 2013
asuad for	

Bid Issue

Bridge Details

Project Number



CONTRACTOR TO PROVIDE SHOP DRAWING FOR ALTERNATE CONNECTION IF SPECIFIED WELD

SIGNED AND SEALED BY A QUALIFIED ENGINEER

CANNOT BE MET. SHOP DRAWING SHAL LBE

LICENSED IN THE STATE OF VIRGINIA.

BRACING WELDS

SCALE: 1-1/2"=1'-0"

SCALE: 3/4"=1'-0"

FRAMING PLAN SCALE: 1/2"=1'-0"

SECTION A-A BRACING

CONNECTION PLATE DETAIL

SCALE: 1-1/2"=1'-0"

PLAN VIEW

BEARING ASSEMBLY

SCALE: 3/4"=1'-0"

SCALE: 1-1/2"=1'-0"

- See Connection Plate Detail $(\frac{20}{13.03})$

½" X 8" FULL

— CLASS A3 CONCRETE BRIDGE ABUTMENT

- I-BEAM, WELD TO

1" x 1'-1" SWEDGED

ANCHOR BOLT, TYP.

----1-1/8" X 3" SLOT

- MAINTAIN MIN. 1-1/2" SPACE BETWEEN BEAM & ABUTMENT WALL FOR EXPANSION

STEEL BEARING PLATE ½" x 12-1/2" x 10"

HEIGHT PLATE

	Bridge Member Schedule	
Member	Minimum Required Size	Center-Center Bearing Distance
Longitudinal Deck Planks	4"x10" Timber Southern Pine #2 (fb=1050 psi)	
Joists	4"x8" Timber Southern Pine #2 (fb=1200 psi)	
I-Beam Bridge #1	W16X31 Grade 50 Steel - Length: 18 LF	17' - 0"
I-Beam Bridge #2	W16x31 Grade 50 Steel - Length: 17LF	16' - 0"
I-Beam Bridge #3	W16x31 Grade 50 Steel - Length: 20 LF	19' - 0"
Reinforcing Bars	#4 Rebar Grade 60 Steel	
	· · · · · · · · · · · · · · · · · · ·	

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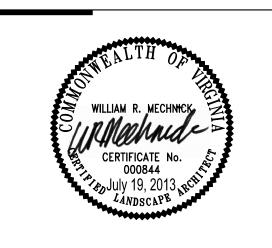
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Appomattox River Greenway Trail Phase III

Colonial Heights, Virginia



Drawn I	⊃у J LB	Checked by WRM
Scale	see sheet	Date July 19, 2013

Bid Issue

- CLASS A3 CONCRETE

LAP 29" MIN.

SHEER KEY

OVER TOE

2" DEEP BY 3" WIDE

MAINTAIN 2' MIN. COVER

Bridge Abutment & Wingwall Details

Project Number

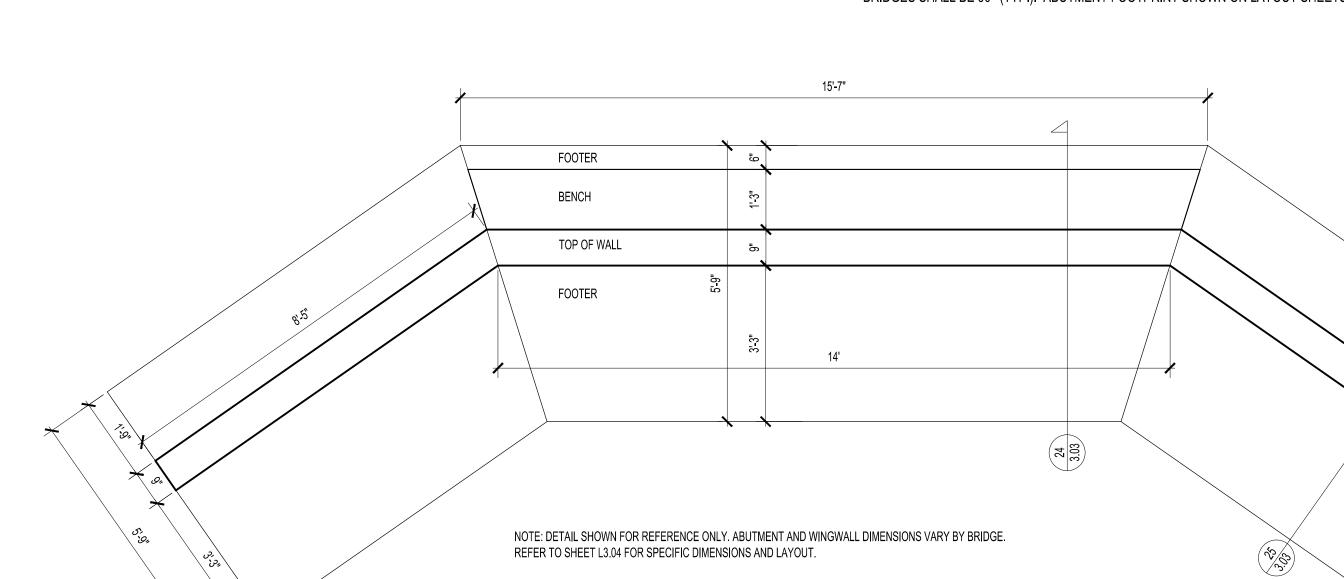
BRIDGE WINGWALL DETAIL- SECTION SCALE: 3/4"=1'-0"

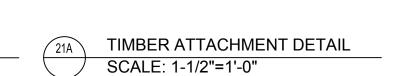
1) ALL REINFORCING BARS ARE TO BE GRADE 60 #4.

2) ALL REINFORCING BARS ARE TO BE SPACED 12" ON CENTER.

POROUS BACKFILL -

6" PIPE UNDERDRAIN -





- 5/8" BRIDGE LUG

- 4'X8" PT JOIST

AS CLOSE AS PRACTICAL

- HAMMER POINTS

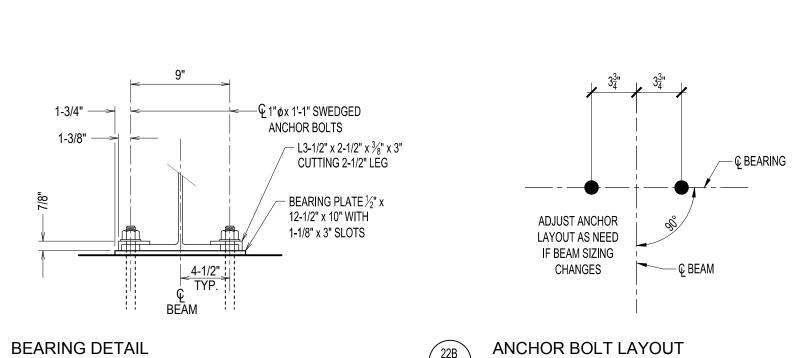
TYPICAL BRIDGE ABUTMENT DETAIL - PLAN

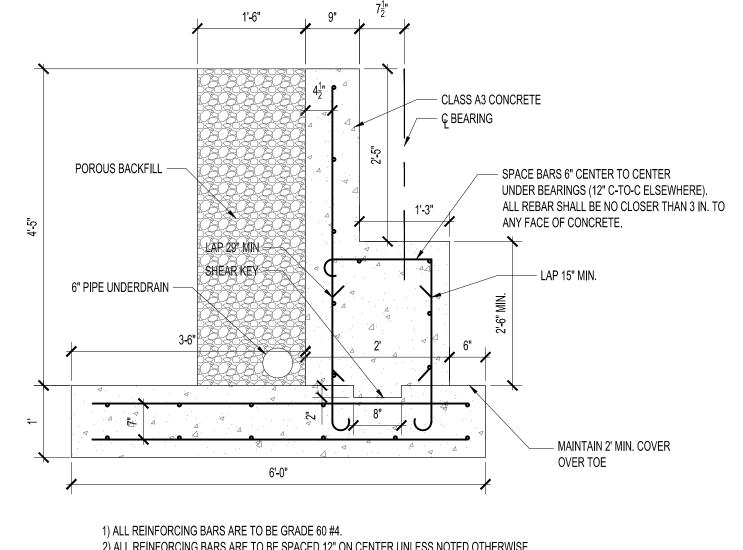
SCALE: 1/2"=1'-0"

INTO WOOD

ALL FIELD CONNECTIONS TO BE MADE WITH $\frac{7}{8}$ " HIGH STRENGTH BOLTS, NUTS, AND

WASHERS (ASTM A325)

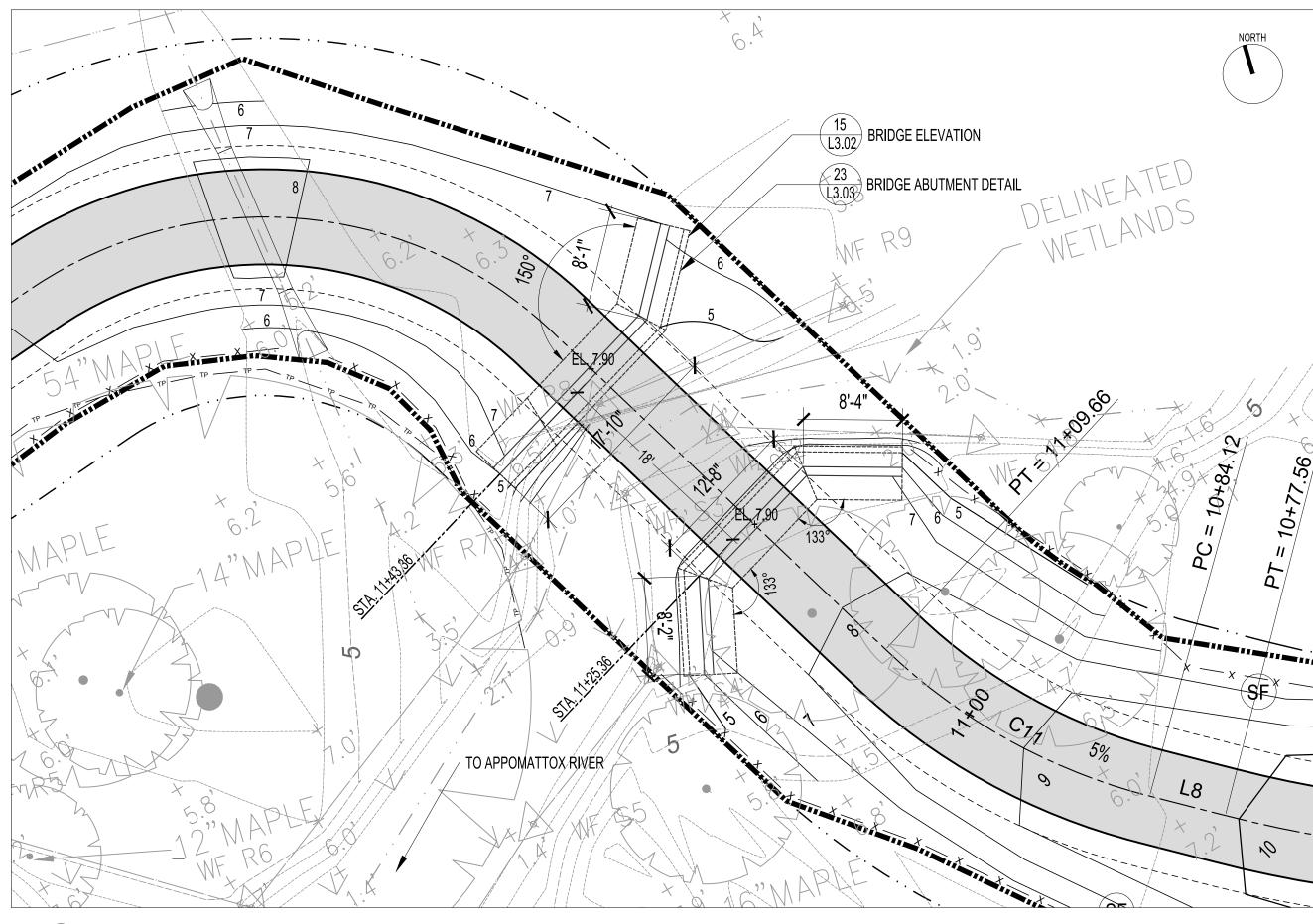


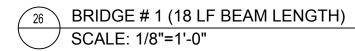


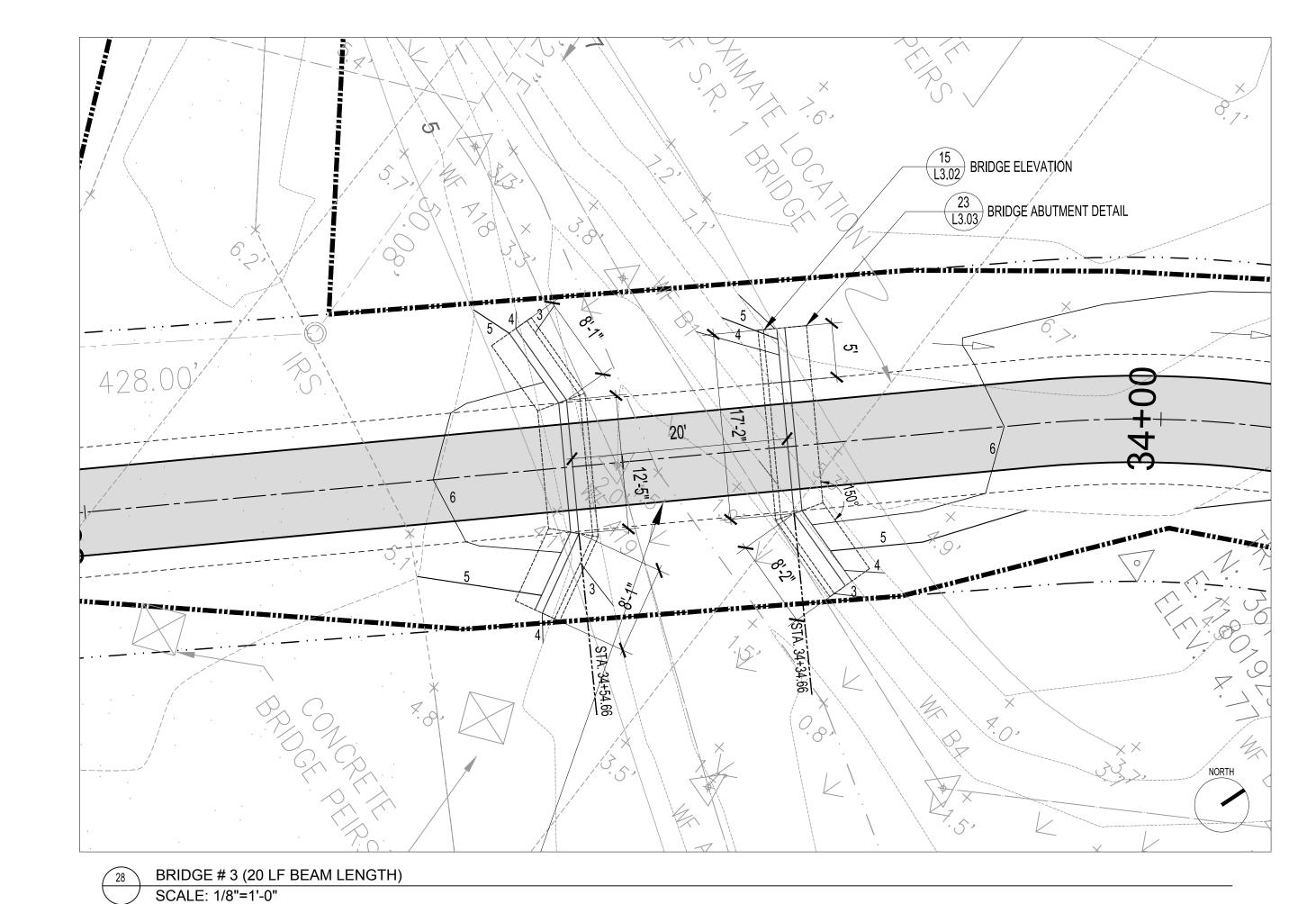


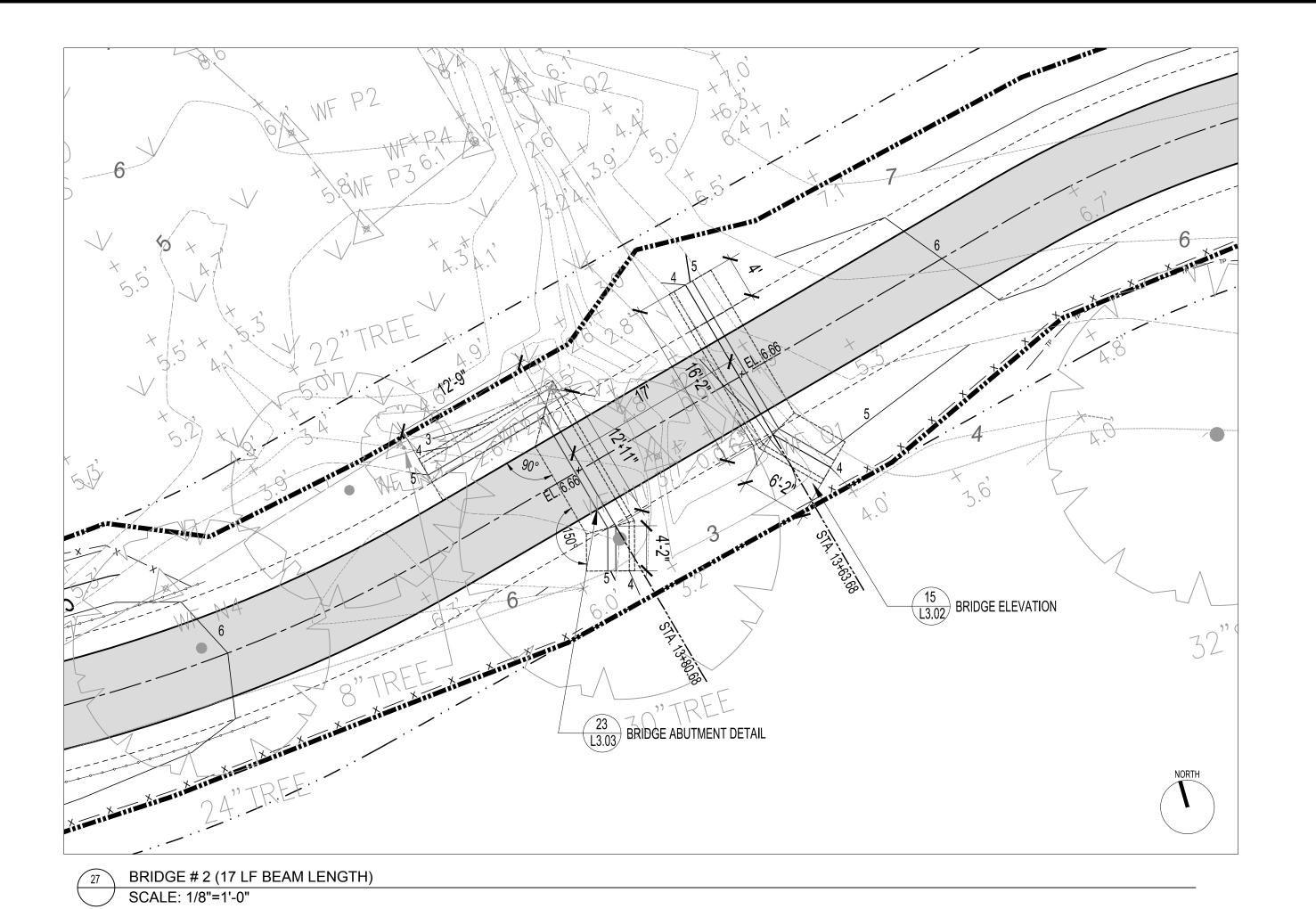
BRIDGE ABUTMENT DETAIL - SECTION SCALE: 3/4"=1'-0"

ANCHOR BOLT LAYOUT SCALE: 1-1/2"=1'-0"





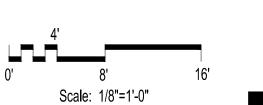




- 1. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND PLANNING DIRECTOR IMMEDIATELY IF FIELD CONDITIONS VERY FROM CONDITIONS SHOWN ON PLAN AND
- REQUIRE FILED ADJUSTMENTS. ADJUSTMENTS ARE ALLOWABLE WITH PRIOR APPROVAL FROM LANDSCAPE ARCHITECT.
- 2. CONTRACTOR TO INSTALL TREATMENT 1 STABILIZATION BLANKETS/MATTING WHERE NEW SLOPES EXCEED 3:1, UNLESS OTHERWISE NOTED ON PLANS. 3. NO WORK SHALL BE DONE OUTSIDE OF THE EASEMENT UNLESS CONSENTED TO BY THE OWNER.
- 4. NO MATERIALS SHALL BE PERMANENTLY OR TEMPORARILY STOCKPILED OUTSIDE OF THE EASEMENT UNLESS CONSENTED TO BY THE OWNER. 5. MAINTAIN SUFFICIENT COVER OVER ALL PIPES. 6. CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL GRADING NECESSARY TO ENSURE POSITIVE DRAINAGE OR FLOW THROUGH ALL PROPOSED CULVERTS



Property line information depicted hereon is from a Boundary Survey complying with 18VAC10-20-370. Existing conditions depicted hereon are from a Topographic Survey complying with 18VAC10-20-382.





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Appomattox River Greenway Trail Phase III

Colonial Heights, Virginia



Checked by ${
m WRM}$ Date **July 19, 2013**

Bid Issue

Bridge & Abutment Layout Plans

